

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

Inquiry by the Department of Telecommunications
and Energy into Bell Atlantic's Compliance with
Section 271 of the Telecommunications Act of 1996

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) D.T.E. 99-271
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**JOINT DECLARATION OF ANNETTE GUARIGLIA, KAREN KINARD
SHERRY LICHTENBERG AND ARLENE RYAN
On Behalf of MCI WorldCom, Inc.**

Based on our personal knowledge and on information learned in the course of our duties, we, Annette Guariglia, Karen Kinard, Sherry Lichtenberg, and Arlene Ryan, declare as follows:

1. My name is Annette Guariglia. I am Senior Analyst, Northern Region Local Competition Group, for MCI WorldCom. I am responsible for representing MCI WorldCom in state commission proceedings in various states (including Massachusetts), performing policy analysis, providing witness support, and participating in section 252 negotiations and in collaborative forums sponsored by state commissions.
2. My name is Karen Kinard. I am an Senior Staff Member in MCI WorldCom's National Carrier Policy and Planning organization. I am responsible for performance measurement development for MCI WorldCom, and I was a key developer of the Local Competition Users' Group's version 7 Service Quality Measurement document released in

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August 1998. I have also been MCI WorldCom's lead representative in carrier-to-carrier performance measurement and remedy discussions in New York, Pennsylvania and New Jersey.

3. My name is Sherry Lichtenberg. I am Senior Manager, Product Development, for MCI WorldCom. My duties include designing, managing and implementing MCI WorldCom's provision of local telecommunications services to residential customers on a mass market basis in New York and nationwide. I am responsible for operation support systems ("OSS") interfaces throughout the country, as well as for facilities testing.

4. My name is Arlene Ryan. I am a Senior Local Implementation Specialist for MCI WorldCom. In that capacity, I act as a liaison between various organizations within MCI WorldCom and incumbent local exchange carriers, including Bell Atlantic. My responsibilities include participation in collaborative process improvement forums designed to facilitate MCI WorldCom's implementation of local exchange service in the Northeast region.

INTRODUCTION AND OVERVIEW

5. The purpose of this Joint Declaration on behalf of MCI WorldCom is to respond to claims made by New England Telephone and Telegraph Company, d/b/a Bell Atlantic-Massachusetts ("BA-MA") in this proceeding and to describe several ways in which BA-MA has not fully complied with the fourteen point "competitive checklist" set forth in section 271 of the Telecommunications Act of 1996 (the "Act"). In doing this, we will emphasize the effect BA-MA's actions have had on MCI WorldCom's efforts to effectively enter the market for local telecommunications services in Massachusetts. This Joint Declaration will also address BA-MA's performance measurements and the need for meaningful performance remedies tied to each

measurement.

6. In New York, Bell Atlantic, with the assistance and supervision of the New York Public Service Commission (“NYPSC”), has made great progress towards fully implementing section 271's competitive checklist. But here, BA-MA has made little progress toward achieving this goal. Significant obstacles to meaningful competition in Massachusetts remain. These include:

- BA-MA’s failure to provide CLECs with existing combinations of UNEs, including both the full combination of network elements (UNE-Platform) and the combination of loop and transport (Expanded Extended Link), on reasonable and nondiscriminatory terms;
- Deficiencies with respect to BA-MA’s provisioning unbundled loops, including significant problems with the basic delivery process for new loops and BA-MA’s discriminatory policy of refusing to unbundle loops served by IDLC or through optical remote switching modules and instead requiring use of inferior and often unavailable alternate facilities;
- Limitations on real-time, mechanized access to pre-ordering loop information critical to the provisioning of DSL services, and excessive loop conditioning charges; and
- The lack of testing to verify the sufficiency of BA-MA’s unbundled switching, and other systems.

7. BA-MA also fails to satisfy section 271 because its performance measurements and remedies are inadequate. BA-MA has yet to include in its performance plan all of the measurements and standards that have been ordered in New York. Meanwhile, those measurements and standards that BA-MA has included in its performance plan are woefully deficient. Finally, BA-MA is not subject to sufficiently severe remedies when its performance falls below the required standards.

**BA-MA’S IMPLEMENTATION OF THE COMPETITIVE
CHECKLIST CONTAINED IN SECTION 271 OF THE ACT**

Access to Unbundled Network Elements in Combination

8. In its affidavits in the current proceeding, filed prior to the FCC’s order promulgating a new Rule 319,¹ BA-MA agreed on paper to make available all individual UNEs included in the original Rule 319 and existing interconnection agreements. BA-MA further recognized that it was obligated by the decision of the Supreme Court reinstating Rule 315(b), as well as orders of this Department,² to “make existing combined UNEs, including UNE platform, available to all CLECs in their combined form.” Affidavit of Paula L. Brown on Behalf of BA-MA (May 24, 1999) (“Brown Aff.”), ¶ 21. Unfortunately, BA-MA has fallen well short of meeting this obligation with respect to both the combination of loop and transport, commonly called an EEL, and with respect to the combination of all network elements, the UNE-Platform (“UNE-P”).

9. **Expanded Extended Link.** BA-MA has filed a proposed tariff for

¹See Third Report and Order and Fourth Further Notice of Proposed Rulemaking, In the matter of the Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC. Docket No. 96-98 (adopted Sept. 15, 1999) [hereinafter “Rule 319 Order”]; as modified by Supplemental Order, In the matter of the Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC. Docket No. 96-98 (adopted Nov. 24, 1999) [hereinafter “Supplemental Order”] .

²See AT&T Corp. v. Iowa Utils. Bd., 119 S. Ct. 721, 737-738 (1999); Consolidated Petitions of New England Telephone and Telegraph Co., et al., pursuant to Section 252(b) of the Telecommunications Act of 1996, DPU/DTE 96-73/74 et al., Phase 4-J Order (MA. DTE March 19, 1999), at 9-10 [hereinafter Consolidated Arbitrations, Phase 4-J Order].

Expanded Extended Link (EEL), a combination of unbundled loop plus transport which could reduce a CLEC's need for collocation by enabling the CLEC to carry traffic from a customer to a remote central office in the LATA where it has a collocation.³ This offering, however, is replete with discriminatory restrictions and costs which demonstrate how far BA-MA has to go to fulfill the requirements of the section 271 checklist.⁴

10. BA-MA claims that EELs are not existing combinations of UNEs under Rule 315(b), the Supreme Court's decision in AT&T Corp. v. IUB, and this Department's orders, and thus that its provision of EELs is "voluntary." BA-MA, however, is fundamentally wrong in its position that EELs are "new combinations" of UNEs. An EEL is simply a combination of loop and transport. BA-MA has stated that it sells at retail private lines, see Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1953, which are made up of the very same combination of network elements. Moreover, BA-MA admits that a carrier such as MCI WorldCom that purchases service out of an access tariff is purchasing loop and transport, id. at 1972, and could provide its own dial tone over these facilities, provided it had its own switch. Id. at 1973-74. This is in fact precisely how MCI WorldCom has begun to provide local service to many business

³See BA-MA Response DTE-RCN 1-1 (Sept. 24, 1999).

⁴Relevant provisions of the proposed tariff were attached by BA-MA in response to discovery requests DTE-RCN 1-4 and 1-5 (September 24, 1999). This Department must evaluate BA's offering of this UNE combination by reference to the tariff terms; BA-MA had received no orders for EEL as of September 24, 1999, see BA-MA Response, DTE-RCN 1-1 (September 24, 1999), nor apparently as of November 19, 1999. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1921. Moreover, as the tariff has not yet been approved, CLECs including MCI WorldCom cannot in fact currently order EELs without amending their interconnection agreements. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1970-71.

customers in Massachusetts because of BA-MA's refusal to make loop and transport available at UNE rates. Consequently, it is clear that loop-transport combinations already exist within the BA-MA network for retail purchase, even before taking into account any internal BA-MA uses of this combination.

11. Accordingly, pursuant to the FCC's new Rule 319, BA-MA is legally obligated to make this combination of network elements available to CLECs, at least in most situations.⁵ The FCC stated that, at a minimum,

To the extent an unbundled loop is in fact connected to unbundled dedicated transport, the statute and our rule 51.315(b) require the incumbent to provide such elements to requesting carriers in combined form. . . . [I]n specific circumstances, the incumbent is presently obligated to provide access to the EEL. *In particular, the incumbent LECs may not separate loop and transport elements that are currently combined and purchased through the special access tariffs. Moreover, requesting carriers are entitled to obtain such existing loop-transport combinations at unbundled network element prices.*

⁵In the Rule 319 Order, the FCC declined to address whether ILECs should be required to combine unbundled network elements that are not already combined, as well as the related question of whether "currently combines" in Rule 315(b) means "ordinarily combined within their network, in the manner in which they are typically combined," citing the pending Eighth Circuit ruling on reinstating Rules 319(c)-(f). Rule 319 Order, ¶¶ 476-79. The FCC nonetheless indicated its continuing support for these rules, which would require ILECs to make UNE combinations available for new service, explaining that the basis of the Eighth Circuit's invalidation of these rules was based on the supposition that "unbundled" means "physically separated" rejected by the Supreme Court in IUB. See id. at ¶¶ 481-82.

In light of the clear anticompetitive effects of limiting the availability of EELs to provide local service, pending the outcome of the Eighth Circuit case, this Department should adopt a broad definition of "existing combination" that will ensure that CLECs have nondiscriminatory access to new exemplars of UNE combinations that BA-MA routinely provides to itself and to its retail customers.

Rule 319 Order, ¶ 480 (emphasis added).⁶

12. In a Supplemental Order amending its Rule 319 Order, the FCC made clear that while it would reserve judgment on whether IXC's could obtain combinations of unbundled loop and transport purely as a substitute for special access until the conclusion of its Fourth FNPRM, an ILEC may not constrain the availability of unbundled loop-transport combinations “if an IXC uses combination of unbundled network elements to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer.” Supplemental Order at ¶¶ 2, 5. The Commission thus went on specifically to state that its Supplemental Order “does not affect the ability of competitive LECs to use combinations of loops and transport (referred to as the enhanced extended link) to provide local exchange service.” *Id.* at ¶ 5. BA-MA's offering runs afoul of all of these holdings.

13. On the pricing front, in addition to the recurring and nonrecurring charges associated with the elements comprising the EEL, BA-MA adds recurring and highly anticompetitive glue charges. Specifically, BA-MA plans to assess a “combination” charge, the basis of which is entirely unexplained, and a “connection” charge “to recover the additional cost associated with the network investment necessary to connect the network elements associated with EEL and/or to provide test access to EEL.” Proposed BA tariff DTE MA No. 17, § 13.5.1.A; BA-MA Response DTE-RCN 1-4 (September 24, 1999). BA-MA has offered no factual cost

⁶ BA-MA's insistence that all EELs are “new combinations” is inconsistent even with its own impoverished reading of Rule 315(b) in the context of UNE-P, where, as demonstrated below, BA-MA at least recognizes that UNEs combined to provide existing local service are “existing combinations” which must be provided together, at the sum of their element costs.

justification for either charge, nor even an explanation of the difference between the two. Indeed, the “connection” charge appears to duplicate charges already covered in the individual element rates, such as the costs of testing. BA-MA’s proposal to collect recurring glue charges is all the more outrageous since BA-MA has not even provided documentation that would support a nonrecurring charge for any independent and thus otherwise uncompensated costs associated with provisioning an EEL. The glue charges BA-MA proposes for EEL are highly discriminatory, for they bear no apparent relationship to costs incurred by BA-MA and thus can be set at an arbitrary level to provide a leverage that will allow BA-MA consistently to underprice its competitors.⁷

14. BA-MA also imposes illegitimate and anticompetitive restrictions on the composition and use of EELs. BA-MA proposes to provide EELs comprising only two-wire analog or digital loops, DS1 or DS3 transport, and associated multiplexing. See Proposed BA tariff DTE MA No. 17, § 13.1; BA-MA Response DTE-RCN 1-5 (September 24, 1999). It

⁷BA-MA’s EEL offering also states that SAC and IAC charges associated with collocation will apply. See Proposed BA-MA tariff DTE MA No.17, Section 13.15.1.C. But the entire purpose of the EEL is to avoid the costs associated with collocation. The collection of some other charges in addition to the SAC in conjunction with offerings other than EELs has proven highly discriminatory. Specifically, the SAC, or Service Access Charge, recovers the cost of pre-wiring from the CLEC collocation cage to the Main Distribution Frame. BA-MA also assesses a Central Office Wiring non-recurring charge, which includes costs associated with running a jumper from the Main Distribution Frame (“MDF”) to the CLEC collocation cage (which costs are already inflated by generous allowances of work time for this labor.) BA-MA has assessed its Central Office Wiring non-recurring charge in situations where it has already assessed the SAC, thereby discriminating by double-collecting the costs of connecting the CLEC collocation to the MDF. Where CLECs have already paid for pre-wiring through the SAC, the only additional work for which BA-MA should be compensated is limited work at the MDF, referred to by BA-MA as “cutting down”. This and any other instances of double collection must be eliminated before BA-MA can be found to satisfy section 271.

refuses to provide four-wire loops as a part of this offering, despite the fact that it offers private line service in Massachusetts at speeds higher than that provided over a two-wire analog loop, and makes four-wire EELs available in New York. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1952-53, 1976; see also Technical Session, DTE 99-271 (November 18, 1999), vol. 9 at 1781-83 (indicating that BA-MA does not offer DS-1 grade loops as EELs). BA-MA admits that there is no technical reason for this limitation. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1971-72. Instead, BA-MA merely justifies it by stating that in its view, “[a]nything beyond two-wire analog or two-wire digital in [BA-MA’s] view would not be used for basic local exchange service,” but would be used to serve large businesses. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1975-76; see also id. at 1953. But it is not BA-MA’s prerogative to determine what facilities CLECs may use, or how to provide competing service. By refusing to provide four-wire loops as part of EELs, BA-MA in effect refuses to provide adequate means of combining one type of UNE – the four wire loop – with transport. This refusal is clearly discriminatory, and goes hand in hand with other illegitimate use restrictions on EEL, discussed below.

15. In Massachusetts, Bell Atlantic also refuses to make available EELs that include concentration equipment using the GR-303 protocol, an option it offers in New York. Concentration devices permit a far more efficient use of facilities, allowing up to 144 voice grade loops to share the capacity of one DS1 interoffice transport, as opposed to the 24 loops to one DS1 provided by simple multiplexing. In other words, GR-303 eliminates the need to dedicate a DS-0 circuit of interoffice transport to each and every voice grade analog loop and thus reduces

the costly “idle” transport capacity that is inevitable with a one-to-one correlation. Without this technology, use of EELs in many circumstances is not cost effective. Because the transport element of the combination is priced on a distance-sensitive basis, it is expensive to run EELs, particularly from remote areas to a collocation located in an area the denser population of which justifies its installation. Without concentration, the costs of EELs to serve such customers are generally prohibitive.

16. In explaining its refusal to offer concentration, BA-MA indicated that it is not deploying GR-303 in its network, and thus contended that MCI WorldCom had no ground to demand installation of and access to this equipment. See Consolidated Petitions of New England Telephone and Telegraph Co., et al., pursuant to Section 252(b) of the Telecommunications Act of 1996, DPU/DTE 96-73/74 et al., Phase 4-K Order (MA. DTE May 21, 1999), at 20 [hereinafter Consolidated Arbitrations, Phase 4-K Order].⁸ **BA Proprietary Begin** REDACTED **BA Proprietary End** See BA-MA Response DTE-MCI W 2-60 (September 24, 1999) & attachment. Because these facilities are available for its own use, BA-MA should be required to provide GR-303 capabilities to CLECs, in order to fulfil the nondiscrimination requirements of section 271.

17. BA-MA’s proposed tariff also imposes illegitimate use restrictions, requiring that CLECs certify, with back-up audits that could reveal proprietary information, that the EEL is being used at least 50% for switched local exchange service and associated switched

⁸This Department did not in the course of the consolidated arbitrations require BA-MA to modify the terms of EEL offering, although it indicated that tariff prices would be subject to further review. Consolidated Arbitrations, Phase 4-K Order at 19, 21.

access. See Proposed BA tariff DTE MA No. 17, § 13.1.1.A; BA-MA Response DTE-RCN 1-5 (September 24, 1999); Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1951-52. BA-MA has no technical justification for this restriction, but imposes it merely based on its own view that it is “voluntarily” providing combinations that it believes are sufficient to provide “basic local-exchange service.” Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1951. This anticompetitive audit requirement is plainly contrary to the order of the FCC, which prohibits ILECs from auditing CLEC usage of loop-transport combinations. See Supplemental Order, ¶ 5, n.9.⁹ Likewise, BA-MA requires that the EEL not be connected to any BA-MA switch or used in conjunction with any other BA-MA service. See Proposed BA tariff DTE MA No. 17, § 13.1.1.C, B; BA-MA Response DTE-RCN 1-5 (September 24, 1999). These restrictions, by which BA-MA tries to direct its competitors’ business and stifle innovation, are plainly anticompetitive.

18. As recently as November 19, 1999, BA-MA confirmed that it would not convert an existing loop and transport combination used for local service but purchased out of a special access tariff into an EEL. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1974-75. Despite the FCC’s recent Rule 319 Order, BA-MA wrongfully contends that it is not “yet” required to do so by the FCC. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1976. But the FCC’s order clearly requires ILECs to provide these elements in combinations when those combinations of elements have already been provided to a customer as a “service.” In

⁹The FCC’s order also imposes no specific local service percentage on use of loop-transport combinations, and establishes a presumption that the CLEC “is providing significant local exchange service if the requesting carrier is providing all of the end user’s local exchange service.” Supplemental Order, ¶ 5, n.9.

this respect as well, BA-MA's service offering even on paper does not comply with federal law.

19. MCI WorldCom's experience bears out that BA-MA intends to stick by the discriminatory terms of its EEL tariff. By letter of May 26, 1999, MCI WorldCom renewed its request of August 1997, pursuant to its interconnection agreement with BA-MA, that BA-MA provide all combinations of 4-wire DS-1 local loop and DS-1 dedicated transport at UNE rates. Because of BA-MA's prior refusal to provide these interconnection T-1s at UNE rates, MCI WorldCom had ordered several hundred of them under BA-MA's interstate access tariff (Att. 1, attached hereto). In a letter of response dated June 25, 1999, BA-MA replied that changes in the law meant that BA-MA was not required to provide UNE combinations, and would provide them only pursuant to a voluntary offering. It thus suggested that in New York, 4-wire T-1s might be converted to BA-NY's EEL offering, and that once BA-MA's newly filed EEL tariff was approved, MCI WorldCom might carry out conversions in Massachusetts in accordance with that tariff (Att. 2, attached hereto). However, since 4-wire loops are unavailable in the proposed Massachusetts EEL tariff, such a suggestion is nonsensical.

20. On September 15, 1999, MCI WorldCom again wrote BA-MA to demand the immediate conversion to UNE pricing of its already-existing interconnection T-1s, which combine loop and transport and carry MCI WorldCom dialtone, on the grounds that such circuits were clearly "existing combinations" within the meaning of this Department's order for BA-MA to make all existing combined UNEs available in their combined form. This letter also noted this Department's ruling that the price for such a combination would be the sum of the individual rates for its UNE components – a conclusion identical to that reached by the FCC in its recent Rule 319

order (Att. 3, attached hereto). On October 13, 1999, BA-MA responded by claiming that it was necessary to amend the interconnection agreement between the parties, which is silent on the subject of EELs, and proposed an amendment under which BA-MA would provide EELs in accordance with its proposed EEL tariff – with the discriminatory terms and conditions described above – pending approval by this Department, and in accordance with the approved tariff thereafter (Att. 4, attached hereto). In sum, then, BA-MA has three times rejected a specific request to honor its clear obligation under the precedents of this Department and the FCC, to supply at the mandated UNE rates the loop-transport combination requested by MCI WorldCom, which is in fact already in use by MCI WorldCom pursuant to special access tariffs.

21. **UNE Platform.** MCI WorldCom's experience in New York demonstrates that where UNE-P is practically available, competitive residential service on a broad geographic scale and in a timely fashion will follow. Since obtaining UNE-P on reasonable and nondiscriminatory terms in New York, MCI WorldCom has provisioned over 160,000 residential lines in the state. UNE-P is critical to creating residential competition because it permits a CLEC to offer local service before it has established the customer base necessary to sustain the considerable investment required to provide service over its own facilities. Meanwhile, unlike resale, UNE-P sustains the potential for a CLEC to use those facilities to provide different service options than those made available by BA-MA. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1958-59. Even where MCI WorldCom has begun to build its own facilities, it would still remain largely dependent on BA-MA for loops to serve residential customers. Bell Atlantic's performance on loop hot cuts for business customers in both New York and

Massachusetts indicates that this provisioning process can not now be reliably scaled for the volume of loops required to offer residential service. Unfortunately, BA-MA's UNE-P offering is filled with unreasonable and discriminatory conditions and costs that make its use infeasible for competitors such as MCI WorldCom.

22. While purporting to recognize its obligation to provide UNE-P in affidavits filed in this proceeding last May, BA-MA held out the prospect that it would be relieved of this obligation if the FCC's then-pending decision on a new Rule 319 did not require unbundling of one or more elements of the platform.¹⁰ It then proclaimed that it would offer UNE-P only through 2003 for all residential customers and for business service in central offices without collocations, at the sum of the UNE prices and other non-recurring charges established by the Department. See Brown Aff. ¶ 12. These initial indications that BA-MA did not intend willingly to offer UNE-P on reasonable and nondiscriminatory terms were confirmed and fleshed out in a subsequent compliance filing in this Department's section 252 dockets, where BA-MA detailed its UNE-P proposal. See BA-MA Compliance Submission on Unbundled Network Element Provisioning, DPU 96-73/74 et al., Consolidated Arbitration Proceedings, (submitted June 18, 1999) [hereinafter "BA Compliance Filing"].¹¹

¹⁰The FCC's revised Rule 319, of course, reaffirms the requirements to unbundle the basic UNEs contained in its original order, continuing the obligations of all ILECs to provide UNE-P. See Rule 319 Order.

¹¹At the Technical Session held on November 19, 1999, BA-MA indicated that it would be making changes to this "compliance filing" to be "more consistent with the restrictions that the FCC included in its recent order." Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1927. These modification have not yet been proposed and so MCI WorldCom cannot

23. BA-MA construes its obligation to provide “existing combinations” at UNE prices to apply only to the elements used to provide existing service – in other words, to migrations of current Bell Atlantic customers to CLECs.¹² This is unacceptable. BA-MA contends that this Department required nothing more in the consolidated arbitration proceedings, when it ordered BA-MA to make “existing combined UNEs, including the UNE platform, available to all CLECs in their combined form.” Consolidated Arbitrations, Phase 4-J Order at 9-

comment on them at this time.

¹²Even BA-MA’s basic UNE-P offering for migrations of existing service is not unproblematic. First, UNE-P is not currently tariffed (nor is tariffing immediately planned), see Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1959, but rather is available only pursuant to interconnection agreements. Id. at 1939. Although the DTE has ordered rates for the UNEs that comprise UNE-P and those elements and rates are contained in MCI WorldCom’s interconnection agreement, the present interconnection agreement between MCI WorldCom and Bell Atlantic does not address UNE-P specifically. Because BA-MA continues to refuse to provide MCI WorldCom with UNE-P until its interconnection agreement is modified to address UNE-P specifically, this existing combination is not in fact available to MCI WorldCom at UNE rates.

Second, current rates for UNE-P and its component UNEs are still in excess of the true TELRIC rates mandated by the FCC. For example, based on BA-MA’s inputs, the Department calculated TELRIC costs assuming the use of DLC facilities based on the TR008 standard. **BA-MA Proprietary Begin** REDACTED **BA-MA Proprietary End** See BA-MA Response DTE-MCI W 2-60 (September 24, 1999) & attachment. Recognizing this discrepancy, state commissions in both New York and Pennsylvania have or are reconsidering their TELRIC rates, understanding that a forward-looking price methodology should incorporate these smaller cost inputs. See Opinion and Order, Joint Petition of Nextlink Pennsylvania, Inc., et al., Docket Nos. P-00991648 & P-00991649, (PA PUC Sept. 30, 1999), at 69-70; Order Directing Rate Reductions, NYPSC Case 95-C-0657 et al. (Oct. 21, 1999) at 11. This Department also should reexamine its UNE rates, including the rates for UNE-P. UNE price issues involving BA-MA must be resolved prior to BA-MA obtaining this Department’s endorsement for section 271 approval, in order to ensure that the mandate of nondiscriminatory access to network elements is met. See 47 U.S.C. § 271(c)(2)(B)(ii).

10 . This interpretation runs contrary to the plain language of the Department’s order, which draws no distinction among customers using the full combination of UNEs. In fact, to do so would be grossly anticompetitive. The combination of elements BA-MA provides to “new installs” is identical to that which it uses to provide service to existing customers. Indeed, in the many cases in which the new install represents a second line, BA-MA is usually already serving the same customer using the same combination of elements, at least up to the loop. Moreover, there is already a mechanism to compensate BA-MA for installing any new loops needed to initiate new local service, in the form of an NRC for this specific task.

24. Based on this false distinction between “new” and “old” lines, BA-MA proposes that where a CLEC seeks to provide new local service, BA-MA will “voluntarily” provide the combination of all network elements, subject to a “glue charge.” As BA-MA freely admits, this “glue charge” is not based on BA-MA’s costs of combining the elements. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1944-46. Rather, BA-MA proposes monthly recurring costs of \$4.69 for a single voice grade circuit, \$6.23 for a DS1 and \$33.46 for a DS3 “are based on BA-MA’s estimate of the collocation expenses that a CLEC will avoid though the purchase of BA-MA combined UNEs.” BA Compliance Filing at 6. BA-MA’s only explanation for imposing this glue charge, which it does not assess in New York, see Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1943-1944, is that it proposed it in response to this Department’s mention of glue charges in its Phase 4-J order. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1944-46. But nowhere did this Department suggest that BA-MA could impose a non-cost based, arbitrary charge.

25. If CLECs cannot competitively offer second lines to customers, or any lines to new customers, they will be severely impaired in their ability to compete in Massachusetts. In addition to persons moving to new residences, industry projections indicate that second lines, whether for data, or to accommodate the calling needs of multiple member households, are and will continue to be a substantial growth area for local service. **MCI Proprietary Begin****
REDACTED ****MCI WorldCom Proprietary End** As a matter of business development, it is essential that MCI WorldCom be able to provide new service as well as migrate customers from BA-MA. And even if it wished to do so, MCI WorldCom could not target its marketing only to customers' existing telephone lines.

26. If MCI WorldCom tried to enter the residential market in Massachusetts using the current limited UNE-P offering, it would have either to turn away requests for new service, thereby alienating new customers and undermining its general reputation as a viable alternative to BA-MA, or lose money on those new installations as a result of BA-MA's prohibitive and unjustified glue charges. The former alternative would damage MCI WorldCom's reputation just as it is starting out in the market. It would result in a de facto two-class system, in which holders of existing lines have the opportunity to take advantage of competitive alternatives, but BA-MA continues to hold a monopoly on new service. The latter alternative is not economically feasible. In the world of residential service, margins are extremely thin. In sum, BA-MA's self-interested attempt to recapture even a part of the very substantial costs of collocation that CLECs are attempting to minimize to make market entry economically feasible will keep CLECs out just as effectively as the collocation requirement itself. This is certainly not

the open market which the 1996 Act mandates.

27. The clear competitive harm from BA-MA's proposal for "new service" UNE-P is increased by the mechanism that BA proposes to enforce it. If, within six months of the initiation of service, any BA-MA retail customer chooses to switch his service to a CLEC who leases the full combination of UNEs, the CLEC will automatically be assessed a "quick flip" charge equivalent to two years worth of the recurring glue charge for that type of loop – \$112.56 for a single loop, \$149.52 for a DS1, and \$803.04 for a DS3 – whether or not the CLEC knows that the customer has been with Bell Atlantic less than six months. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1942-43; BA-MA Compliance Filing at 6. BA-MA's proposal would require MCI WorldCom to ask potential customers how long they had been with BA-MA, and then decline to serve them if they had been with BA-MA less than six months, because the costs of acquiring their business would be prohibitive. Six months is hardly a "quick flip" given a truly competitive market and number portability, as the substantial churn seen in the long distance market indicates. Moreover, BA-MA's six-month monopoly would doubtless be stretched even longer, as a customer is unlikely to come back quickly to a CLEC who once turned them away.

28. BA-MA does not assess a "quick flip" charge in New York or any other state. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1943; BA-MA Response DTE- MCIW 2-13 (September 24, 1999). The reason is clear: A more blatant attempt to restrict consumer choice and customer movement, harm competitors and impede their growth, and otherwise maintain BA-MA's historic monopoly cannot be imagined. This quick flip charge is simply a remedy on CLEC success in providing attractive competitive alternatives.

29. BA-MA also places a sunset of 2003 on its offering of “new” UNE-P. There is no technical reason for this restriction. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1946. This limitation is absolutely unjustified, anticompetitive and unlawful. The FCC’s new Rule 319 order clearly rejects sunsets for unbundling. See Rule 319 Order at ¶ 152. As long as the FCC or this Department requires that the components of UNE-P be unbundled, BA-MA is required to provide nondiscriminatory access to them, in a manner that permits their combination. Placing any arbitrary time limit on the availability of this combination will undermine its use and harm competition. In the face of a sunset, MCI WorldCom would alternatively (1) have to commit to provision facilities sufficient to support the service now provided by UNE-P by the time that the UNE-P offering expires, a business judgment that may be unjustified or impossible to make on the basis of current market data, in anticipation of an expiration three years away; (2) have to be prepared to convert UNE-P customers to resale at a resale price that does not support CLEC entry; or (3) be prepared to lose its customers in three years, giving BA-MA a significant windfall of returned business. Given this Hobson’s choice in Massachusetts, MCI WorldCom would likely choose to focus its local service efforts in a different state which it has some prospect of retaining its customers over the long term.

30. BA-MA imposes an additional anticompetitive condition on new UNE-P service for business: it refuses to make this combination available if even a single CLEC is collocated at the central office serving the customer in question. See Technical Session, DTE 99-

271 (Nov. 19, 1999), vol. 10 at 1946-47.¹³ BA-MA would enforce this restriction even if the only collocation were that of a data CLEC that did not offer any voice service. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1955-56. This limitation is also unlawful after the FCC's Rule 319 Order requiring that all of the component elements of the UNE-P must be unbundled. It is also clearly anticompetitive, for it means that as soon as a single CLEC collocates, no other competitor will be able to serve customers at that central office without collocating – thereby requiring other CLECs to own network facilities, in contravention of this Department's orders and the decision of the Supreme Court.¹⁴

31. This limitation is also deeply anticompetitive because of the difficulties with collocation. First, MCI WorldCom has no information about the location of other CLECs' collocations to use in planning, and so will not know in advance that some single competitor is about to invest in facilities in an area (revealing locations where collocation is planned is tantamount to describing a CLEC's business expansion strategy). Second, there is no reason to believe that the collocating CLEC will be willing or technically able to allow MCI WorldCom to use its collocation to provide service to its customers. Third, even if MCI WorldCom were prepared to collocate as well in an office, there might not be available space for such a

¹³In New York, the use of UNE-P for business is limited to those central offices where fewer than two collocations exist, and even this more liberal restriction has prevented MCI WorldCom from using UNE-P to offer business service, impeding the development of the most robust competition there.

¹⁴See Consolidated Arbitrations, Phase 4-E order at 13-14; Consolidated Arbitrations, Phase 4-J Order at 5, n.8 (citing Supreme Court affirmation that CLECs need not own facilities to access UNEs).

collocation. Finally, even if MCI WorldCom is able to proceed with collocation, at significant expense, this effort will take at least six months to complete, delaying MCI WorldCom's ability to provide service and thus to give customers served by that central office competitive choices.

32. The total effect of BA-MA's restrictions on UNE-P for new service orders is clear. At best, there will be no competition for new lines, resulting in a two-class market in which existing customers can get competitive alternatives, but BA-MA maintains a monopoly on new service. At worse, CLECs will abandon their efforts to enter the residential market in Massachusetts altogether. These are not the hallmarks of an irreversibly open local market, and cannot be squared with the objectives of the Act and the requirements of section 271.

33. **Other UNE Combinations.** This Department specifically ordered BA-MA to propose a non-discriminatory way of interconnecting new combinations of network elements, other than through collocation. See Consolidated Arbitrations, Phase 4-K Order at 9, 26-27. To date, BA-MA has provided no viable response. Relying on its mistaken position that EELs and UNE-P (as well as a third combination, the switch sub-platform) are "new combinations," BA-MA maintains that its "voluntary" offerings for EELs, UNE-P and the switch sub-platform supply all that is required. BA-MA has failed to explain how it will make it possible for MCI WorldCom and others CLECs to combine the unbundled elements of BA-MA's network in new configurations. And, with respect to "other uncombined UNEs – which may exist in combined form elsewhere in BA-MA's network", BA-MA has merely stated that it would provide them in accordance with proposals brought by CLECs under the bona fide request process, including

assessing costs of engineering, provisioning, and OSS development.¹⁵ This is not sufficient to meet this Department's requirement that BA-MA affirmatively develop alternatives to collocation as means of creating new UNE combinations. It is also clearly not sufficient to carry BA-MA's burden under section 271 of showing that it in fact, and not merely on paper, provides nondiscriminatory access to UNEs in accordance with sections 251(c)(2) and 252(d)(1).

Access to Unbundled Loops

34. In addition to its shortcomings with regard to UNE combinations, BA-MA's performance with regard to individual unbundled elements, including the critical bottleneck of the local loop, is also deficient.

35. The only evidence BA-MA has offered to prove it is providing CLECs with nondiscriminatory access to unbundled loops is the fact that it has provided an insignificant number of loops to CLECs over the past three years. See Affidavit of Amy Stern on Behalf of Bell Atlantic-Massachusetts (May 24, 1999) ("Stern Aff.") ¶ 60. As of September 30, 1999 – three years after BA-MA allegedly opened its markets to competition – BA-MA reports that it has provisioned only 7,522 two-wire analog POTS loops, 2,243 two-wire digital loops, zero four-wire analog loops, and zero DS-1 loops. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1556-57. Nevertheless, BA-MA asserts that these statistics alone demonstrate that BA-MA has the requisite systems and processes in place to provision loops to CLECs in significant commercial volumes. Id.

¹⁵BA-MA Compliance Submission on Unbundled Network Element Provisioning, Consolidated Arbitration Proceedings (submitted June 18, 1999) at 4.

36. The fact that BA-MA has provisioned a few thousand loops over the course of three years, most of which are serving CLEC business customers, does not demonstrate that BA-MA has the ability to provision the thousands of residential and business loop orders BA-MA can expect to receive from CLECs each day when local markets are fully and irreversibly open to competition in Massachusetts. Moreover, BA-MA's performance during loop cutovers is a significant factor when judging whether BA-MA is providing CLECs with nondiscriminatory access to unbundled loops, and BA-MA's statistics of loops provisioned say nothing about how many of these loops were provisioned on time, and correctly.

37. For these reasons and others, BA-MA's ability to provide nondiscriminatory access to unbundled loops cannot be established until BA-MA's loop provisioning systems and processes have been thoroughly tested by KPMG. This testing has not yet even begun.

38. In fact, Bell Atlantic's performance in New York – where testing has been completed by KPMG and where the loop provisioning systems and processes are the same as those used by BA-MA in Massachusetts – raises significant doubts about BA-MA's ability to provide large volumes of loops in Massachusetts. As the Department of Justice concluded in its evaluation of Bell Atlantic's New York section 271 application to the Federal Communications Commission:

Bell Atlantic's performance in processing orders for hot cuts of unbundled loops appears to suffer from a number of deficiencies which, collectively, impose significant costs on CLECs and degrade the quality of service they can offer to their customers. Because of these deficiencies, competition through this important mode of entry is seriously

constrained.¹⁶

39. In addition to cutovers of existing service, BA-MA must demonstrate adequate performance in providing new loops. But MCI WorldCom is experiencing significant problems with the delivery of new voice-grade loops in both Massachusetts and New York.

40. First, MCI WorldCom continues to have problems in obtaining usable demarcation information in conjunction with Bell Atlantic's installation of new unbundled loops. Demarcation information, which describes where the BA-MA technicians have terminated the loop facilities, is necessary in order for the customer's hardware vendor to be able to extend dialtone to the customer's equipment. A cutover cannot be successfully completed without this information. Although BA-MA is now finally providing demarcation information, this information is not always accurate. BA-MA must continue to improve its performance in this area.

41. Second, BA-MA's on-time performance for new loops is poor, and when loops are provisioned, MCI WorldCom has found that they are often defective. Based on Bell Atlantic's responses to trouble tickets, a majority of these defects have been the result of an "open" condition in the Central Office, meaning that BA-MA has not wired the loop to the Main Distribution Frame, a very basic step in the installation process. Despite this evidence that the

¹⁶Evaluation of the United States Department of Justice, In the matter of Application by New York Telephone Company (d/b/a Bell Atlantic - New York), Bell Atlantic Communications, Inc., NYNEX Long Distance Company, and Bell Atlantic Global Networks, Inc., for Authorization to Provide In-Region, InterLATA Services in New York, CC. Docket No. 99-295 (Nov. 1, 1999) ("DOJ NY 271 Evaluation") at 14.

problem lies with its own technicians, BA-MA's initial response to MCI WorldCom's complaints was to propose that MCI WorldCom engage in "cooperative testing" similar to that which some data CLECs, who typically order small quantities of loops, have adopted to ensure that they can serve their customers. However, this type of oversight of BA-MA's basic installation process is not a scalable solution for serving large numbers of loops, including many loops ordered at once to serve a single end user, as MCI WorldCom does. MCI WorldCom has asked BA-MA to resolve its internal problems with basic installation and continuity testing before requiring MCI WorldCom to devote additional resources to helping BA-MA carry out this fundamental function for voice grade loops. BA-MA has now indicated that one way to insure proper loop installation is for MCI WorldCom to commit definitively to provide dialtone prior to the time that the BA-MA technician arrives to physically install the loop, enabling the BA-MA technician to test for dialtone to verify that he has correctly connected the circuit. MCI WorldCom continues to discuss this and other possibilities with BA-MA's RCCC staff.

42. **Loops Served by IDLC Facilities.** Despite its unequivocal obligation to provide CLECs with nondiscriminatory access to unbundled loops, BA-MA admits that it does not always provide CLECs with the same loop facilities that it uses as part of its own retail services. See Stern Aff. ¶ 33. Indeed, BA-MA states that when a customer migrates to a CLEC, BA-MA will never lease a stand-alone loop served by IDLC technology to the CLEC, even if BA-MA previously served the customer with IDLC, and despite the fact that the recurring charges that BA-MA currently charges CLECs are based on the assumption that BA-MA is deploying a 100% IDLC-compatible network. Instead, BA-MA will reassign that customer's service to alternate

spare facilities -- either loops served by Universal Digital Loop Carrier (“UDLC”) or copper pairs.

See id. ¶ 33, n.24. And for those CLEC customers for which a suitable copper pair or UDLC facility does not exist, BA-MA will make alternate facilities available to a CLEC only if the CLEC assumes responsibility for their construction costs. See BA-MA Discovery Response DTE-MCIW 2-20 (Sept. 24, 1999).¹⁷

43. BA-MA’s refusal to provide loops served by IDLC to its competitors even when BA-MA has itself served the customer with IDLC facilities is highly discriminatory. Copper pairs and loops served by UDLC are vastly inferior to loops served by IDLC. Consequently, MCI WorldCom and other CLECs must be able to lease loops served by IDLC if they are to compete effectively with BA-MA. This is especially true in Massachusetts where a large percentage of loops are served by IDLC, and many customers will be affected. In addition, the number of IDLC-served loops can only be expected to grow over time. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1693-94. Thus, as time goes on, this problem will become more and more severe.

44. A loop served by IDLC has distinct and significant technical advantages over copper pairs and loops served by UDLC facilities, and is also less costly. This technical

¹⁷BA-MA stated during the technical conference that there are absolutely no instances in Massachusetts where alternate facilities do not exist when IDLC is deployed. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1609, 1681. This claim is simply not true. As described below, MCI WorldCom has already been involved in at least one situation where it ordered a loop from BA-MA that was served by IDLC and no alternate facilities existed. It took BA-MA over five weeks to get back to MCI WorldCom with the cost of constructing the alternate facilities.

contrast is particularly great when comparing IDLC to copper pairs. IDLCs concentrate traffic and support a much more efficient network design than routing distinct copper pairs all the way from the central office to each consumer's premises.

45. BA-MA's substitution of copper pairs for IDLC can also result in noticeable degradation in service for the customer. Depending upon its age and condition, the copper may not provide reliable service. Moreover, depending on the copper's length and condition, the customer may experience an appreciable degradation in voice quality -- hisses and cracks (impulse noise and attenuation) that were not present when BA-MA was providing service over IDLC. Because of these very problems, BA-MA has replaced copper feeder with digital loop carriers where necessary throughout its network.

46. Customers returned to service using copper pairs may also notice considerably degraded service when transferring data. Depending upon the length and quality of the copper wire brought back into service, an Internet user with a 56 Kbps modem may receive a noticeably slower modem bit-rate when the signal is traveling on analog copper wire than when the data is transferred over a much shorter copper connection to an IDLC with a digital transmission facility connecting it to the central office switch.

47. Finally, ISDN and DSL service may not be available for customers served by long copper loops. ISDN does not ordinarily work if carried on an analog copper loop for more than 18,000 feet and DSL loses a significant amount of its available bit rate after traveling 12,000 feet on copper, while some DSL technologies stop working altogether on loops greater than 18,000 feet in length. Thus, BA-MA's insistence that it will bypass its loops served by IDLC

by providing CLECs with long copper loops will foreclose CLECs' ability to offer many customers ISDN and DSL services. Presumably, many CLEC customers who experience these problems will switch back to a superior service offered by BA-MA.

48. Many of these technical limitations associated with copper loops are not solved by BA-MA's commitment to provide loops served by UDLC in place of some IDLC loops. UDLC is an inefficient technology that became outdated at the same time that carriers converted from analog to digital switches. With UDLC and an analog switch, a digital signal arriving at the central office is converted to voice grade analog signals at a Central Office Terminal and then terminated on the line side of the Main Distribution Frame. A connection for each voice grade signal is then made between the horizontal side of the Main Distribution Frame and the analog switch.

49. With the introduction of digital switches, the digital to analog conversion at the central office became unnecessary and inefficient. This is because the analog signal has to be converted back to digital (through an Analog Interface Unit) before connection to the switch line port of the digital switch. For this reason, local exchange carriers have deployed IDLC instead of UDLC. Use of IDLC eliminates the digital-to-analog and analog-to-digital conversions at the central office and allows the digital signal to flow unimpeded (and unconverted to analog) from the digital loop carrier to the switch line port.

50. Deployment of IDLC is critical for the provision of data and enhanced services because the multiple analog/digital conversions required by UDLC result in slower transmission of data through a customer's modem. If BA-MA customers served on IDLC move to

MCI WorldCom and are downgraded to UDLC, when they plug in their personal computers and attempt to download information from the Internet, their modem speed will be reduced from 56 Kbps to 28.8 Kbps.

51. Also, because of multiple analog/digital conversions, and because UDLC is an older technology and no UDLC vendors have integrated DSL functionality with their UDLCs, UDLC technology is incapable of supporting DSL services. Thus, MCI WorldCom customers downgraded onto UDLC will be unable to utilize DSL services.

52. BA-MA's filings and testimony in this proceeding ignore the significant limitations of serving customers with a copper pair or UDLC facilities. Moreover, BA-MA has never given any technical reason why it cannot provide CLECs with loops served by IDLC. Instead, BA-MA has raised purported operational and regulatory issues. For example, BA-MA claims that in order to provide CLECs with IDLC loops, it will have to develop a new UNE and/or new UNE combinations with DS-1 interfaces that are currently not offered by BA-MA. See BA-MA Response DTE-MCIW 2-27, 2-28 (Sept. 24, 1999). This issue is clearly something that can be easily solved by BA-MA. Nevertheless, BA-MA has refused to agree to a loop provisioning collaborative to resolve these types of issues. BA-MA should not be allowed to hide behind such trivial impediments when, in the meantime, CLECs' abilities to compete in Massachusetts are being significantly impeded.

53. Bell Atlantic has fully admitted in states other than Massachusetts that it is technically feasible to unbundle loops served by IDLC and provide those loops to competitors. Thus, versions of IDLC that contain the GR-303 integrated interface (commonly called Next

Generation Digital Loop Carriers (“NGDLCs”)) can be unbundled at the DS-1 level. The GR-303 interface enables IDLC facilities to be unbundled, among other methods, by routing CLEC traffic to the CLEC’s own interface group, and then electronically rerouting that traffic to the CLEC’s facilities on DS-1s, without ever converting the digital signal to analog. Therefore, whenever BA-MA has an IDLC with the GR-303 interface installed and CLECs are willing to interconnect at the DS-1 level it is easily possible for them to do so.

54. Bell Atlantic itself conceded in the New York that it is technically feasible to unbundle loops served by IDLC at the DS-1 level:

To the extent that CLECs reach a level of penetration into a particular central office that would justify DS1-level interfaces to a digital loop carrier system, electronic cross-connection of NGDLC loops would be possible in a forward-looking architecture. . .

Report of Bell Atlantic-New York on the Feasibility of Alternative Means for Implementing Central Office Cross-Connections, NYPSC Case 95-C-0657 et al. (Nov. 23, 1998) (“BA-NY Feasibility Report”) at 14 (Att. 5, attached hereto).

55. The NYPSC recently found that it is technically feasible for BA-NY to lease to competitors loops served by IDLC with GR-303, and that GR-303 technology will be assumed in the upcoming New York UNE rate-making proceeding. Specifically, the NYPSC found that:

[S]ubscriber loops can be most efficiently provided via integrated digital loop carrier technology using the GR-303 protocol, and [] the employment of this technology will allow for electronic cross-connections and for the provision of ISDN-BRI. Moreover, in combination with a fiber-based integrated digital loop carrier network, this would all but eliminate the need for a copper main distribution frame at the central office -- a potential significant savings in investment and expense.

Order Directing Rate Reductions, NYPSC Case 95-C-0657 et al. (Oct. 21, 1999) at 11 (Att. 6, attached hereto). Even Bell Atlantic has admitted that deployment of GR-303 results in significant cost savings over older forms of IDLC, not to mention UDLC and copper pairs. See BA-MA Response DTE-MCIW 2-60 and proprietary attachment.

56. Although BA-MA claims it has no GR-303 DLC applications in its network today, see BA-MA Response DTE-MCIW 2-59 (Sept. 24, 1999), BA-MA has provided a network plan indicating that **BA-MA Proprietary Begin** REDACTED **BA-MA Proprietary End** See BA-MA Responses DTE-MCIW 2-60 & attachment; Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1686. And even where BA-MA has older versions of IDLC (i.e., with the TR-008 interface) installed in its network that are not currently capable of being dedicated to a CLEC or multi-hosted between BA-MA and other CLECs, such equipment can be outfitted with this functionality without regard to whether BA-MA itself uses such capability.

57. For all of these reasons, BA-MA's proposal to reassign an existing customer served by a loop with IDLC technology to either a copper pair or UDLC facilities when that customer migrates to a competitor is highly discriminatory and anticompetitive. Without access to loops served by IDLC, MCI WorldCom's and other CLECs' ability to use unbundled loops to serve residential and small business customers will be severely impaired.

58. Moreover, even if a CLEC is forced to accept BA-MA's offering of a copper pair or UDLC, BA-MA consistently fails to move customers to alternate facilities in a timely or efficient manner. BA-MA has proposed and implemented the same coordinated "hot cut" loop provisioning process that it is using in New York. See Stern Aff. ¶ 58. These hot cut

procedures are designed to connect active loops from BA-MA's network to a CLEC's network with minimal service disruption. Thus, for hot cuts of loops not served by IDLC (when a BA-MA technician must only perform a cross-connect at the central office), BA-MA agrees to perform the hot cut at any specific time MCI WorldCom asks, which is usually after 6 p.m. when there will be little disruption to a customer's business.

59. But when the hot cut involves a loop served by IDLC (which involves work by a BA-MA technician at both the central office and in the field at the remote terminal), BA-MA insists that its technicians will only perform the hot cut during the customer's business day and refuses to designate an exact time during the day when the hot cut will occur. Instead, BA-MA will only agree that the hot cut will occur at some unspecified time during a four hour window (i.e., 8 a.m. to 12 p.m., or 1 p.m. to 5 p.m.). See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1675.

60. As a result, CLEC customers are forced to experience service disruption at the height of their business day, without even knowing the exact time when the disruption will occur. Moreover, because the disruption will happen when the BA-MA technician performs work at the remote terminal -- rather than at the customer's premises -- the disruption will come as a complete surprise to the customer. The customer may be on the phone and suddenly lose dial tone, or may be about to make a call and find the phone dead. Potential MCI WorldCom customers have been unwilling to accept these arrangements. For this reason and others, BA-MA's hot cut process is highly discriminatory.

61. In addition, BA-MA has been guilty of sending confirmations of cutover

dates before verifying whether or not the loop to be cutover is served by IDLC. As a result, after MCI WorldCom has notified and committed to a customer that the cutover will take place on a specific day, BA-MA has notified MCI WorldCom that the cutover will have to be postponed until BA-MA determines whether alternate copper pairs or UDLC facilities exist or, if they do not, until those facilities are constructed. This has resulted in needless inconvenience and cost for both MCI WorldCom and its customers, many of whom have scheduled work by third-party vendors in reliance on the scheduled cutover date.

62. Lastly, where alternate facilities either do not exist or are not of good quality and BA-MA must construct new facilities, BA-MA sometimes does not notify the CLEC of this fact until less than 24 hours before the scheduled cutover. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1622-24. Thus, hours before the scheduled cutover, the CLEC is forced to notify its customer that the cutover will be significantly delayed. Indeed, in at least one instance, it has taken BA-MA over five weeks to inform MCI WorldCom of the cost for constructing the new facilities.

63. **Loops Served by Optical Remote Switching Modules.** BA-MA reports that there are twenty optical remote switching modules (“ORMs”) in Massachusetts serving 57,210 loops or 1.2% of all loops in the state. See BA-MA Response 2-30, 2-34 (Sept. 24, 1999).¹⁸ Of these twenty ORM’s in the state, eight are located in Boston, serving 22,176 loops or 3.7% of the loops in Boston. See BA-MA Response 2-29, 2-33 (Sept. 24, 1999). BA-MA treats

¹⁸At the Technical Sessions, BA-MA reported there are twenty-one ORM’s in Massachusetts right now. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1598.

loops that are served by ORMs the same as loops that are served by IDLC. BA-MA will never lease an ORM-served loop to CLECs, but instead will transfer the customer's service to alternate UDLC or copper facilities. See BA-MA Response DTE-MCIW 2-35 (Sept. 24, 1999).¹⁹ Where no alternate facilities exist, BA-MA will construct new facilities, but at a high cost to the CLEC. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1596-97.

64. This is highly anti-competitive because a loop served by an ORM (like an IDLC loop) is usually connected to the central office by high-speed fiber facilities that carry a digital signal with no analog conversion. By transferring the customer's service to UDLC facilities or copper pairs, BA-MA deprives CLECs and their customers of these efficiencies. For all of the reasons discussed above, CLEC customers moved from IDLC facilities with ORM to UDLC or copper pairs will experience a serious degradation in service when transmitting and receiving data.

65. Of the twenty ORMs deployed in the state, twelve have no spare alternate facilities. See BA-MA Response DTE RR 66 (Nov. 18, 1999). BA-MA has no policy to deploy ORMs with alternate facilities. Therefore, where no spare facilities are available and a CLEC would like to offer service to a customer served by one of these ORMs, BA-MA will have to construct alternate facilities. The special construction costs charged by BA-MA to do so are unique and determined by BA-MA on an individual case basis. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1601-02.

¹⁹BA-MA witnesses have testified that all ORMs in Massachusetts are in the field. See Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1593.

66. For two MCI WorldCom unbundled loop orders at two ORM sites in Massachusetts (Rockland and Framingham), BA-MA has quoted MCI WorldCom the exorbitant charge of \$395.01 per loop per month for ten years to construct alternate facilities. See BA-MA Response DTE RR 67 (Nov. 18, 1999). This charge would result in a total charge of \$47,400 over the ten year period. BA-MA has stated that even if the customer terminates service with MCI WorldCom sooner than the ten years, MCI WorldCom would still be responsible for the remaining balance. Moreover, the time frame given by BA-MA to complete construction of the alternate facilities is 16 to 24 weeks, with the interval for providing only a specific time and cost quote taking approximately five weeks. See BA-MA Response DTE RR 67 (Nov. 18, 1999).

67. These terms and conditions are highly discriminatory because it will be impossible for MCI WorldCom to recoup these costs from a customer, and no customer will tolerate waiting 16 to 24 weeks to receive new service from MCI WorldCom.

68. MCI WorldCom has asked BA-MA to provision UNE-P at unbundled loop prices as a solution for provisioning an unbundled loop when the loop contains an ORM. But BA-MA has refused to do so, stating that it will only provision UNE-P for these customers if MCI WorldCom pays the full UNE-P rate. BA-MA has also refused CLEC requests to provisions loops served by an ORMs via EEL, but has not to date provided any explanation for its refusal.

69. **Loops Used to Provide Advanced Services.** Despite BA-MA's claims to the contrary, see Stern Aff. ¶ 47, BA-MA is unable adequately to provide loops to its competitors to be used for DSL-based services in commercially significant quantities. This is an especially critical failure in light of the important role DSL technology is likely to play as telecommunication

markets evolve, and in light of the FCC’s ruling in the UNE remand proceeding.²⁰ In that proceeding, the FCC declined to require ILECs generally to make available DSL-equipped loops as part of the UNE platform. Without access to DSL-equipped loops, CLECs will have to obtain stand-alone DSL-capable loops²¹ and attach them to their own DSL equipment collocated at ILEC end offices and/or remote terminals. Accordingly, if BA-MA cannot effectively deliver stand-alone DSL-capable loops in commercially significant quantities, it will retain a monopoly over this technology, and an insurmountable advantage in offering bundled products that telecommunications customers want.

70. One of the most glaring deficiencies in the way BA-MA makes DSL-compatible loops available to CLECs is its refusal to provide CLECs with nondiscriminatory access to all loop makeup information on a real-time, mechanized basis. The pre-ordering processes introduced by BA-MA do not provide this necessary functionality. As a result, it is impossible for CLECs to inform their customers promptly and reliably of the availability of DSL-based services. This is the same deficiency that MCI WorldCom and all major data CLECs complained of in their comments to Bell Atlantic’s New York section 271 application to the FCC and the same deficiency that the Department of Justice identified as a significant problem.²²

²⁰In re Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, FCC 99-238 (rel. Nov. 5, 1999).

²¹DSL-“equipped” loops have BA-MA’s electronics already attached while DSL-“capable” loops are “clean,” with no repeaters, bridged taps, etc., and are ready for use once CLECs’ attach their own electronics.

²²See DOJ NY 271 Evaluation at 26.

71. BA-MA currently offers CLECs three tiers of access to loop qualification data. First, CLECs can mechanically access a mechanized loop qualification database specifically designed for BA-MA's limited ADSL retail offering. See Stern ¶ 48. Second, CLECs can request that BA-MA manually research and provide additional loop make-up information. Third, CLECs can request that BA-MA conduct an engineering query for more detailed information about the loop. See BA-MA Response DTE-MCIW 2-51 (Sept. 24, 1999); Technical Session, DTE 99-271 (Nov. 18, 1999), vol. 9 at 1561-52.

72. It is anticompetitive that BA-MA's mechanized loop qualification database only provides loop make-up information relevant to the limited DSL services that BA-MA offers its own retail customers. BA-MA's mechanized loop qualification database does not provide loop make-up information that is critical for CLEC-specific DSL offerings, which vary substantially from BA-MA's DSL retail offering -- an offering limited to ADSL.²³ For example, BA-MA's database only contains data about (1) loop length including bridged tap for non-loaded loops²⁴

²³ADSL is an "asymmetric" DSL configuration designed to provide a high-bandwidth signal in the downstream direction (up to 1.5 Mbps for loops up to 18,000 feet in length and up to 7 Mbps for loops up to 6,000 feet in length, assuming 2-wire loops of 24-gauge copper) and a lower bandwidth signal in the upstream direction. It is frequently deployed for customers whose primary interest is high-speed Internet access, which involves heavy downstream traffic flows (i.e., downloading web-site pages) and little upstream traffic (i.e., a few keystrokes and occasional uploads of e-mail and data files).

²⁴The loop length with bridged tap provides the "total loop length." But CLECs require the "working loop length" -- the loop length without bridged tap -- to determine what types of DSL can be offered. This is because providing the total loop length introduces the possibility of severe margin of error in the length information provided. For example, a loop that measures a total length of 18,000 feet could have up to 6,000 feet of bridge tap, and thus only 12,000 feet of working loop length.

(load coils should not have been place on loops that are under 18,000 feet), and (2) whether or not the loop can support BA-MA's ADSL retail offering – a simple yes or no response.²⁵ See DTE-MCIW 2-51 (Sept. 24, 1999); DTE-MCIW 2-52 (Sept. 24, 1999); Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 9 at 1561-62. Nevertheless, BA-MA has indicated that it will charge CLECs²⁶ a monthly recurring charge of \$0.61 per loop for access to its mechanized loop qualification database, which is what Bell Atlantic currently charges CLECs in New York. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1859; BA-NY's Proposed P.S.C. 916 Tariff (effective Sept. 9, 1999) ("BA-NY DSL Tariff"), section 5.5.2 (Att. 7, attached hereto).²⁷

73. But there are different kinds of DSL technology and to determine whether a copper loop can work with those other DSL technologies, more and different information is needed about the loop. CLECs who wish to offer more than the one kind of ADSL offered by BA-MA need to know, in addition, (1) the length of the loop without bridged taps,²⁸ (2) the

²⁵There are several reasons that a loop may fail to meet BA-MA's technical requirements for its retail ADSL offering. For example, in addition to the loop (including bridged taps) being greater than 18,000 feet in length, the loop may require "conditioning" (i.e., the removal of bridged taps and load coils), or may be provided over a digital loop carrier system. The yes/no indicator in the mechanized loop qualification database does not contain any of this detailed information.

²⁶BA-MA is currently preparing a DSL unbundled loop tariff. See BA-MA Response DTE-MCIW 2-45 (Sept. 24, 1999).

²⁷Designating this charge as a monthly recurring charge makes absolutely no sense because it compensates BA-MA for the alleged costs associated with a CLEC dipping into the database one time. Such a charge should be non-recurring.

²⁸Bridged taps refer to the ILEC practice of configuring the loop plant in such a way that a single wire pair can be used to serve multiple end-user locations (although not simultaneously). DSL technology can be deployed on a loop equipped with bridged taps, so long as the bridged

location and number of bridged taps, (3) the loop wire gauge, (4) spectrum management information, (5) the presence of load coils,²⁹ digital loop carriers, repeaters,³⁰ Digital Added Main Lines (“DAMLs”),³¹ pair gain devices and potential disturbers (e.g., T-1s), and (6) the availability of alternate qualifying facilities if the loop does not qualify for DSL. BA-MA acknowledges that none of this critical information is included in BA-MA’s mechanized loop qualification database. See BA-MA Response DTE-MCIW 2-51 (Sept. 24, 1999).

74. All of this information is critical because each DSL technology has different parameters and its own unique loop requirements. For example, ADSL can only be offered to customers within approximately 18,000 feet of a central office (which is why only information about loops up to that length is included in BA-MA’s database), while SDSL and IDSL can be provisioned on loops of up to 20,000 feet and 26,000 feet in length, respectively.³²

taps are not excessive in length. The total cumulative length of bridged taps on a loop must generally be less than 2,500 feet to support DSL service.

²⁹Load coils are devices placed on a copper loop at regular intervals if the loop exceeds a certain length, typically 18,000 feet. Load coils modify the electrical characteristics of a copper loop to overcome the attenuation distortion associated with long loops. No DSL technologies can be deployed on loops equipped with load coils.

³⁰Repeaters are used to boost the signal strength to avoid attenuation on long loops. Repeaters must be removed before loops can be used for all DSL services, except IDSL.

³¹BA-MA and other incumbent have recently begun deploying a technology known as DAML, which are devices that are placed in the distribution portion of the loop plan and are used to derive two voice-grade POTS circuits from a single copper pair. The presence of DAMLs precludes use of the loop to support most DSL technologies.

³²Symmetric DSL, or “SDSL,” supports symmetrical data transmission rates of up to 1.5 Mbps in each direction for loops that do not exceed 20,000 feet in length, assuming 2-wire loops of 24-gauge copper. Integrated DSL, or “IDSL,” supports a data transmission rate of 128 Kbps

IDSL uses the same coding and parameters as ISDN and, therefore, unlike all other forms of DSL which require “clean” copper loops from end-to-end (i.e., no interfering loop equipment such as load coils, repeaters, and digital loop carriers, and minimal bridged taps), IDSL loops can include repeaters and digital loop carrier systems.

75. Thus, a CLEC can only determine the type of DSL service that would be best suited for a particular customer if it has access to all information about that customer’s loop. Indeed, if a customer’s loop is more than 18,000 feet in length, BA-MA’s mechanized loop qualification database will not contain any information about that loop.³³ See BA-MA Response DTE-MCIW 2-52 (Sept. 24, 1999). However, there are types of DSL service that a CLEC may be able to provision over a loop longer than 18,000 feet, and the CLEC needs detailed information about the make-up of the loop to provision the appropriate DSL service.³⁴

76. The only way the CLEC can access that information is through BA-MA’s time-consuming manual processes. See BA-MA Response DTE-MCIW 2-51 (Sept. 24, 1999).

in each direction on 2-wire loops of up to 26,000 feet in length, assuming loops of 24-gauge copper.

³³In New York, at least, Bell Atlantic has made a verbal commitment to include all “non-loaded” loops (i.e., no load coils), regardless of length, in the mechanized loop qualification database. MCI WorldCom does not know whether or not this has happened. In any event, this commitment by Bell Atlantic does not add much new information to the database because most loops of greater than 18,000 feet contain load coils and, therefore, are still excluded from the database. The only loops that will be added are those whose length with bridged taps exceeds 18,000 feet (and therefore were formerly not included in the database), but whose length without bridged taps is less than 18,000 feet (and therefore are not loaded).

³⁴BA-MA indicates that even High Bit Rate DSL (“HDSL”) requires BA-MA to conduct an engineering query to determine if it can be provided over a particular loop. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1845.

This is inadequate because when a customer calls a CLEC to inquire about DSL service, the CLEC needs instant access to all information about the technical make-up of the customer's loop in order to efficiently and rapidly determine the best possible service for the customer. BA-MA's mechanized loop qualification database does not presently meet this critical need.

77. CLECs who find BA-MA's mechanized loop database inadequate must resort to two manual loop qualification processes. First, a CLEC may request that BA-MA conduct a Manual Loop Qualification.³⁵ Although this process provides slightly more information than that contained in BA-MA's mechanized loop qualification database, it is also inadequate. BA-MA's Manual Loop Qualification will only provide a CLEC with: (1) the loop length including bridged taps, (2) the presence of load coils (yes or no), (3) the presence of a digital loop carrier (yes or no), and (4) whether or not the loop is ADSL/HDSL qualified (yes or no). See BA-MA Response DTE-ATT 1-131 (Sept. 24, 1999).

78. This information is woefully deficient for CLECs who would like to offer something other than ADSL service. In fact, the only additional useful information that a CLEC will receive is the identification of a digital loop carrier, and even this information is inadequate because it does not include whether or not spare facilities exist if in fact the customer is served by

³⁵In New York, BA-NY charges CLECs \$62.13 per loop to conduct a Manual Loop Qualification. See BA-NY DSL Tariff, section 5.5.2, 5.5.4.1. BA-MA's witness during the Technical Sessions indicated that BA-MA's cost studies calculated a charge of \$60.91. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1848.

a digital loop carrier.³⁶ As stated above, however, CLECs need additional information, including the length of the loop excluding bridged taps, the location and number of bridged taps, the loop wire gauge, spectrum management information, and the presence of load coils, repeaters, DAMLs, and pair gain devices.

79. Since the Manual Loop Qualification will not provide a CLEC with the loop make-up information it needs, it inevitably will have to request that BA-MA conduct an Engineering Query. Upon such a request, a BA-MA engineer will manually look at multiple sources³⁷ and provide the CLEC with at least four additional pieces of information: (1) number and location of bridged taps; (2) number and location of load coils; (3) number of repeaters; and (4) presence of Pair Gain Devices. See BA-MA Response DTE-MCIW 2-51 (Sept. 24, 1999). In New York, Bell Atlantic's Engineering Query also supplied information about the length of the loop without bridged taps, the location of a digital loop carrier (still with no indication whether

³⁶As mentioned earlier, BA-MA has agreed to rearrange the customer's service to either a copper pair or UDLC if the loop is served by IDLC. However, rearrangement onto UDLC does not resolve the technical issues for use with DSL technologies. Thus, CLECs must know whether or not alternate copper facilities exist.

³⁷One of these sources is a BA-MA internal mechanized database called LFACS, which contains much of the loop make-up information that CLECs need (i.e., presence, number and location of bridged taps; presence of load coils; length by gauge; number of gauge changes, presence of pair gain devices, DLC, or DAMLs; and whether alternate facilities are available). See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 2005-07. In addition, BA-MA has indicated that its Trunk Interoffice Record Keeping System (TIRKS) retains the presence of T-1 circuits in specific cable complements. BA-MA refuses to provide CLECs with real-time, mechanized access to either of these databases, or any direct access to these databases on a read-only basis. Moreover, BA-MA is unwilling to populate its mechanized loop qualification database with any data from the LFACS or TIRKS database.

alternate copper facilities exist), and the cable gauge at a specific location. See BA-NY DSL Tariff, section 5.5.1.1(D).

80. When BA-MA conducts an Engineering Query, it will not only charge CLECs for the query itself, but also for an Engineering Work Order, which involves the engineering costs associated with verifying facilities availability, writing the work order and preparing a special bill. See BA-MA Response DTE-MCIW 2-54 (Sept. 24, 1999). In New York, these two charges totaled more than \$200 per loop, and BA-MA's witness at the Technical Sessions stated that the charge in Massachusetts would likely be the same. See BA-NY DSL Tariff, section 5.5.2; Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 2001. Even with these charges, BA-MA still will not provide information relating to DAMLs, T-1s or alternate facilities.

81. Clearly, CLECs would need to utilize the Engineering Query option in virtually every instance to determine conclusively what types of DSL an individual loop can carry. But the cost of the query is so high as to make its use economically impossible. Additionally, a CLEC's reliance on this manual process would significantly and unreasonably delay its provision of DSL services to its customers. In fact, Bell Atlantic proposed in New York, and will likely do the same in Massachusetts, that an Engineering Query takes three days for it to complete, at least during normal demand periods. See BA-NY DSL Tariff, section 5.5.3; Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1847.

82. The sum of the matter is that no CLECs will be able to offer, in commercially significant quantities, DSL-based services other than the ADSL service offered by

BA-MA, if they have to rely on the expensive and time-consuming manual processes proposed by BA-MA. BA-MA is the steward of the Commonwealth's loop plant, a valuable commodity it has been allowed to construct and maintain as the monopoly provider of telephone service in the Commonwealth over the last century. BA-MA refuses to create an electronic database containing the characteristics of that loop plant necessary to put that loop plant to use to provide high-speed data services through DSL-based technology, except to the very limited extent that BA-MA itself is prepared to offer such services.

83. This is unacceptable. It effectively denies the citizens of Massachusetts the full use of their telephone lines, and by so doing subjects them to precisely the kinds of abuses that competition is designed to alleviate -- the monopolist's tendency to deter innovation whenever it alone decides it cannot profit by its development. It also assures BA-MA will have an unfair "first mover" advantage in the DSL market: only when BA-MA decides that it will benefit from the deployment of a range of DSL-based services will it develop the necessary electronic loop databases that will make such deployment possible. And only when its retail offering is ready to be deployed will it create the infrastructure to support that offering. Other CLECs will forever lag behind. In a market in which consumers demand a bundled service offering that includes high-speed data, this first-mover advantage in the provision of data services will prove fatal to CLECs that would like to compete by offering their own unique bundle of services. It is no wonder that other States to have addressed this question have concluded that their ILECs should be required to create an electronic database that enables all LECs to provide the full range

of DSL-based services.³⁸

84. In addition to cumbersome and costly DSL loop pre-qualification procedures, BA-MA's DSL offering will also include high non-recurring charges to "condition" DSL loops. Although BA-MA has not yet tariffed these conditioning charges, it has indicated that the rate structure will be similar to that proposed in New York. See BA-MA Response DTE-MCIW 2-47 (Sept. 24, 1999). If that is the case, BA-MA's conditioning charges will likely be enormous. For example, in New York, Bell Atlantic charges \$423.94 for removing one bridged tap from a loop, and \$945.39 for removing multiple bridged taps from a loop. Meanwhile, Bell Atlantic in New York charges \$1,466.84 for removing load coils from a loop up to 21,000 feet in length, and \$1,814.49 for removing load coils from a loop up to 27,000 feet in length. See BA-NY DSL Tariff, section 5.5.2.

85. Adding these charges together, the total amount charged by Bell Atlantic in New York for ordering and provisioning a two-wire ADSL qualified loop of less than 18,000 feet

³⁸Indeed, the New Jersey and Pennsylvania commissions recently recognized this. The New Jersey commission ordered Bell Atlantic to populate its mechanized loop qualification database by March 31, 2000 with, among other things, the presence of DAMLs, the presence of load coils, the presence of digital loop carrier, and loop wire gauge. See In re the Board's Investigation Regarding the Status of Local Exchange Competition in New Jersey, NJBPU, Docket TX98010010, Summary Order, at 8 (Oct. 6, 1999). Meanwhile, the Pennsylvania commission criticized Bell Atlantic for failing to provide competitors with real-time electronic access to crucial loop makeup information, and concluded that Bell Atlantic's mechanized loop information database (which is identical to the database proposed in Massachusetts) "is insufficient because this database was developed to support the specific needs of BA-PA's more limited ADSL retail offering and does not include crucial loop information needed for other xDSL services." Pennsylvania Public Utility Commission Docket No. P-00991649, Opinion and Order (Sept. 30, 1999) at 113-14.

in length could total over \$1,500 in non-recurring charges. See BA-NY DSL Tariff, section 5.5.2. Meanwhile, if a CLEC requires a loop of longer than 18,000 feet in length to provide DSL service to a customer, the total charges to a CLEC may exceed \$4,000 per loop. See id. section 5.5.2.

86. A CLEC almost certainly generally will be unable to recoup all these costs from the customer. Thus, if BA-MA's DSL charges are similar to or higher than those proposed by Bell Atlantic in New York, CLECs' ability to compete with BA-MA for DSL customers will be severely impeded.

87. Lastly, BA-MA's DSL offering is discriminatory because BA-MA insists that it will continue to use its own undefined and undefended proprietary spectrum management guidelines until "final adoption" of industry standard power spectral density ("PSD") mask standards. See Stern Aff. ¶ 48. Yet BA-MA has made no commitment to comply with all industry standard PSD mask standards once they are adopted, and has not yet taken any affirmative steps to implement those industry standards that already have been finally adopted. Specifically, BA-MA has made no commitment to accept deployment of DSL technologies that comply with industry standards T1.601, T1.413 and TR28, which have been adopted and which the FCC has said are presumed acceptable for deployment. See In re Deployment of Wireline Service Offering Advanced Telecommunications Capability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147 (rel. March 31, 1999) ("First Report and Order and NPRM") ¶ 67. Nor has BA-MA committed to deploy any technology which "has been successfully deployed by any carrier without significantly degrading the performance of other services or has been approved by . . . any state commission." Id.

88. BA-MA’s insistence that CLECs who wish to deploy DSL must follow BA-MA’s proprietary spectrum management guidelines is contrary to the FCC’s requirement that incumbents provide “nondiscriminatory access to [its] spectrum management procedures and policies,” see First Report and Order and NPRM ¶ 72, as well as with these more specific FCC requirements.

89. Apparently, the only DSL technologies BA-MA is willing to discuss are those DSL technologies which it offers its own retail customers. BA-MA indicates that it will allow competitors to offer other varieties of DSL only if the technologies have been “demonstrated to work” and “do not cause interference in the network.” See Stern Aff. ¶ 47. But this determination – which has never been more fully explained by BA-MA – should not solely and exclusively be made by BA-MA. The FCC specifically rejected this practice, finding that “incumbent LECs should not unilaterally determine what technologies LECs, both competitive LECs and incumbent LECs, may deploy. Nor should incumbent LECs have unfettered control over spectrum management standards and practices.” First Report and Order and NPRM ¶ 63. Finally, in this regard, BA-MA has never committed to honor the FCC’s standard that a LEC may not deny any use of its network unless it proves to the state commission that the use “will significantly degrade the performance of other advanced services or traditional voice band services.” Id. ¶ 67.

90. In sum, the residents of Massachusetts have to date been deprived of the many benefits of DSL. While this no doubt protects BA-MA’s monopoly-priced T-1 service, it badly disserves the public interest. Nothing in BA-MA’s filings suggest that BA-MA is at this

point willing to open its market to DSL competition.

Unbundled Switching

91. BA-MA reports that, to date, it has not received any orders in Massachusetts to provide unbundled local switching. See BA-MA Response DTE 2-88 (Oct. 8, 1999).³⁹ This is principally because BA-MA's UNE-P offering in Massachusetts is wrought with discriminatory restrictions and anti-competitive charges. As in New York, the vast majority of unbundled switching arrangements that BA-MA will provide will be a part of the unbundled network element platform.

92. As a result, BA-MA's ability to provision local switching remains largely theoretical in Massachusetts. Moreover, BA-MA's provision of local switching has not yet been tested by KPMG or any other independent third-party.

93. MCI WorldCom expects that when testing does occur in Massachusetts, the independent third-party tester will discover that BA-MA's provision of local switching is plagued by many of the same problems as in New York. In New York, Bell Atlantic's ability to provision local switching was largely hampered by Bell Atlantic's refusal to test and insure that the Network Design Requests ("NDRs") used to configure Bell Atlantic's switches were implemented properly.⁴⁰

³⁹In the recent Technical Sessions, BA-MA indicated that it had recently provisioned 404 UNE-P orders, which would include the switching element. See Technical Session, DTE 99-271 (Nov. 19, 1999), vol. 10 at 1921.

⁴⁰MCI WorldCom recently submitted its first Massachusetts NDR, which is not scheduled for completion until the first week of December.

94. In New York, where switching tests were inadequate, MCI WorldCom's fledgling commercial endeavors encountered a variety of switch translation errors with results ranging from MCI WorldCom customers being routed to BA-branded directory assistance, to customers being unable to reach certain area codes or numbers, including 911. Such errors can at worst be life-threatening, and at best are extremely destructive of MCI WorldCom's service and reputation and thus its ability to compete.

95. To avoid subjecting customers to these problems, BA-MA's switch provisioning must be rigorously tested, and measures put in place to guarantee continuing performance when switching functions must be updated, as for example when new area codes are added.

96. An additional significant reason that MCI WorldCom and other CLECs have not leased unbundled local switching from BA-MA is that current unbundled switching rates are significantly inflated, failing to reflect the substantial discounts that BA-MA receives from vendors when they purchase new switches. As a result, BA-MA's switching rates are not based on the cost of providing switch-related network elements.

97. In adopting a permanent unbundled switching rate, this Department, like the commission in New York, completely accepted BA-MA's assertion that it would not receive the substantial discounts from switch vendors that it did in 1994 during the switch replacement program. BA-MA speculated that these substantial discounts resulted solely from BA-MA's one-time, large-scale conversion from analog to digital switches, and that a carrier replacing existing digital switches with new ones, rather than converting from analog to digital, would be unable to

receive the same discounts.

98. Just as in New York, this Department accepted BA-MA's speculation and excluded these substantial discounts in calculating switching rates.⁴¹ But the New York commission has since reversed its position and, based on new evidence, has concluded that the substantial discounts were not uniquely associated with the analog-to-digital switch replacements, but are also available for all new switch purchases.⁴² Bell Atlantic did not dispute the accuracy of this new evidence and, in fact, admitted that it "misspoke" when it previously stated that the higher discount level was limited to analog-to-digital replacements. Bell Atlantic now admits that this claim was wholly erroneous.⁴³

99. As a result of this significant error, the NYPSC has begun a full re-examination of most UNE rates -- including rates that reflect no switching costs. According to the NYPSC, the inaccurate testimony from Bell Atlantic has resulted in a "web of interconnected effects," influencing its pricing decisions in a "variety" of "unpredictable" ways, and warranted not only a comprehensive review of UNE switching rates, but of all UNE rates.⁴⁴ The same review, at least for switching, should be required in Massachusetts.

⁴¹See Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding, NYPSC, Case 95-C-0657 et al. (Sept. 30, 1998) at 3.

⁴²See id. at 5 & n.3.

⁴³See id. at 7, 9.

⁴⁴See id. at 10-11.

PERFORMANCE MEASUREMENTS AND REMEDIES

100. As the Department recently recognized in its Letter Order on Final OSS Master Test Plan (Nov. 19, 1999), BA-MA's current performance measurements and remedies – consisting of measurements and remedies from the Consolidated Arbitrations and supplemental metrics included in BA-MA's section 271 filing – do not adequately address FCC and DOJ concerns relating to section 271 compliance. The Department highlighted a number of deficiencies with BA-MA's current performance plan, including the need for additional measures, disaggregation of UNE-L and UNE-P flow-through data, and an accurate hot-cut measurement. The Department further noted that, based on a KPMG comparison study of the measurements proposed by BA-MA versus the measurements endorsed by DOJ and reported in other jurisdictions – including New York – it soon will issue a supplemental list of measurements not included by BA-MA in its section 271 filing. According to the Department, these supplemental measurements, when combined with the measurements already proposed by BA-MA, will constitute an adequate Performance Assurance Plan ("PAP") to be examined by KPMG.

101. While the Department is moving in the right direction in issuing a supplemental list of performance measurements, it is not enough to just adopt measurements for the purpose of the KPMG test. The PAP that is adopted should be subject to the full adjudicatory process, including CLEC input. In addition, CLECs should be given the opportunity to comment on BA-MA's business rules for any additional measurements, as well as comment on the business rules that BA-MA implemented pursuant to the Department's earlier arbitration rulings.

102. The PAP should also include sufficient remedies for poor performance to

deter BA-MA from backsliding into poor performance once it has achieved interLATA entry. The consequences for poor performance under BA-MA's existing performance remedies plan are not nearly severe enough to deter non-compliance.

Performance Measurements

103. At a minimum, the performance measurements developed as part of the New York Carrier-to-Carrier process, as finalized in the New York 271 proceeding, as well as the full disaggregation ordered in New York, should be incorporated into BA-MA's performance plan in Massachusetts. Bell Atlantic has voluntarily agreed to these same measurements in New Jersey and Pennsylvania and has even added additional measurements to address specific problems in the Bell Atlantic-South region. But, so far, BA-MA has refused to import these measurements into Massachusetts.

104. **Change Management.** One of the significant omissions in BA-MA's current performance plan is the absence of any performance measurements or remedies for change management. These measurements and remedies are critical to ensure that BA-MA does not suddenly change its OSS interfaces or software to the surprise and detriment of CLECs. More specifically, change management measurements and remedies ensure that BA-MA will (1) send timely notices to CLECs of all interface changes, (2) send CLECs timely and appropriate documentation for those changes, (3) allow CLECs to test and validate new software before its introduction, and (4) timely repair software problems caused by BA-MA software changes.

105. Change management measurements and remedies have been ordered in New York by the NYPSC. These measurements and remedies are:

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Percent Change Management Notices Sent On-Time (notification and confirmation)
** Performance credits from \$250,000 to \$500,000 depending on magnitude of miss

Change Management Notice Delay 8 Plus Days (notification and confirmation)
** Performance credits of \$25,000 per day

Percent Software Validation
** Performance credits from \$100,000 to \$1,000,000 depending on the magnitude of the miss

Delay Hours – Failed/Rejected Test Transactions – No Workaround (Software Resolution Timeliness)
** Performance credits of \$50,000 per day per release

106. Despite the presence of change management measurements and remedies in New York, they are not currently part of BA-MA’s performance plan in Massachusetts. These measurements and remedies clearly need to be imported into Massachusetts prior to section 271 approval.

107. **OSS**. BA-MA needs to include as part of its performance plan a better measure of OSS Availability. Specifically, this measurement needs to test OSS availability on a disaggregated basis.

108. It is unclear from BA-MA’s filings whether BA-MA aggregates all OSS interfaces in its measurement or whether it only tests the availability of one preorder OSS interface, since that is the only interface addressed in BA-MA witness Garbarino’s affidavit. See Affidavit of Kenneth L. Garbarino on Behalf of Bell Atlantic-Massachusetts (May 21, 1999) (“Garbarino Aff.”) ¶ 14. In any event, disaggregation by interface for each OSS interface that CLECs use is needed if the measurement is to be of any benefit at all.

109. For example, BA-MA should measure the availability of the Web GUI II (until discontinued) and the new GUI III interface. For both systems, CLECs have recently been experiencing many outages. BA-MA has claimed in the past that it cannot measure GUI II query response times, but it recently acknowledged in New York and at the November 23, 1999 DTE technical hearings that it can measure the GUI III. See Technical Session, DTE 99-271 (Nov. 23, 1999), vol. 12 at 2431. Therefore, BA-MA can use GUI III queries to measure this interface's availability, just as it uses such queries to measure the availability of the EIF and the EDI interface. BA-MA clearly must measure the availability of the preordering interfaces that CLECs actually use rather than the EIF interface that no CLECs use.

110. In addition, noticeably absent from BA-MA's reporting is query response times for its Web GUI and Rejected Query Intervals and the Number of Queries that Time Out, with a standard limiting time outs. MCI WorldCom has experienced slow responses, time outs and outages with both the EDI PreOrder and GUI III interfaces. Also, BA-MA needs to adopt a measurement on whether BA-MA reports OSS Outages Within 20 Minutes of when the outage occurs. Such a measurement has been adopted in New York.

111. Finally, even for those OSS interfaces that BA-MA currently measures with its EnView robots, MCI WorldCom is concerned about whether these robots can accurately emulate query response times and monitor interface availability. MCI WorldCom is not convinced that the scripts accurately emulate all types of queries made by CLECs, such as covering requests for multiple as well as single page CSRs, multiple as well as single telephone number reservations, and loop qualification queries that produce non-qualified, as well as

qualified type responses. And as for using the canned robot queries that only pull up the same account or same number for testing interface availability, MCI WorldCom is concerned that the queries only go through one of four ECXpert boxes, and not the boxes that the major carriers are using. This methodology is flawed because it does not capture the outages of the other three EXCpert boxes.

112. **Order Confirmation Timeliness.** BA-MA's current measurement for Order Confirmation Timeliness is deficient to the point of being of little use. First, although BA-MA often issues multiple confirmations on a single version of an order, the Order Confirmation Timeliness measurement only measures the timeliness of the first confirmation. Thus, the measurement excludes the timeliness of all later confirmations resent by BA-MA, even if the reason that BA-MA resent those confirmations was BA-MA error.

113. This is contrary to what is being done in New York where the NYPSC has required Bell Atlantic to count all resent order confirmations. The NYPSC's rationale in doing so is that if Bell Atlantic were only required to test the timeliness of the first confirmation it sends, then Bell Atlantic would have the incentive to initially send unusable confirmations in order to meet the interval, and then take its time to send a later accurate and completed order confirmation, since these later confirmations are not measured for timeliness.

114. Second, BA-MA's measurement for Order Confirmation Timeliness is deficient because its benchmark of 90% is too low given the extremely long interval of 72 hours (for 10 or more lines) set for confirmation. The interval for order confirmations rarely is more than 48 hours in most states. There is no justifiable reason that it should take 72 hours to confirm

an order. For example, SBC agreed in Texas to a 48 hour measurement interval for manual loop orders of greater than 50 loops and for electronic confirmations of loop order of more than 100 loops. Thus, BA-MA's measurement interval of 72 hours for electronic confirmations is excessive and should rarely be missed by BA-MA. It is not, therefore, a helpful measure of BA-MA's performance. MCI WorldCom would be surprised if BA-MA takes this long to tell its retail customers when their orders for 11 or more lines could be delivered.

115. Finally, BA-MA does not include a business rule recommended by KPMG in the New York OSS test. The rule, subsequently adopted by the NYPSC in the Carrier-to-Carrier proceeding, requires BA-MA to use the completion notice receipt date by the CLEC as the stop clock for instances where the confirmation is missing.

116. **Flow Through.** Despite the Department's explicit order to provide a designed/achieved flow through measurement over a year ago, BA-MA still has not done so and only offers the flow through metric set forth in the FCC's Merger Order. Moreover, the 95% measurement on the achieved flow through measurement, as revised from 99% in the NYPSC's November 5, 1999 Carrier-to-Carrier order, should be carried over to Massachusetts. CLECs were not aware of how many orders identified as "designed to flow through" actually fell to manual intervention until the NYPSC's June 30, 1999 Carrier-to-Carrier order set the first 99% standard based on KPMG's flow through experience, and BA-MA scurried to do studies of what fell out, and why, in trying to fight this standard. The beneficial workshops with CLECs on this issue only stemmed from the NYPSC setting this benchmark, and such a process might have begun in Massachusetts before New York if only BA-MA had promptly complied with the

Department's 1998 order establishing the new Flow Through metric.

117. Further, as CLEC questions during the November 22nd and 23rd DTE technical hearings highlighted, much of the fall out of the flow due to what BA-MA claims are CLEC error are often errors caused by the CLEC's inability to prepopulate orders based on preorder query information, lack of clear or any identified business rules from BA-MA, or use of an address from the CSR that does not match an address in the Address Validation database that is acceptable for flow through.

118. **Hot Cuts.** BA-MA's current hot cut measurement captures only on-time performance by BA-MA (i.e., completed during the cut over window). See Garbarino Aff. ¶ 77. For this reasons, KPMG in New York stated that this hot cut measurement was inadequate. A hot cut measurement needs to capture much more information than on-time performance, such as how early, late and defective cuts affect the customer's service. It also needs to address the problems CLECs face when defective loops are delivered and whether troubles with defective loops can be reported immediately. Finally, the hot cut metric needs to capture the number of orders the CLEC "supped" to push back the due date, and the mean time to restore a customer with a hot cut service disruption.

119. **Billing.** BA-MA states that it is currently developing a measurement for bill-accuracy, and that as of October 1999 it will be able to report results for that measurement. See Technical Session, DTE 99-271 (Nov. 22, 1999), vol. 11 at 2110. Apparently, the measurement will compare, for both wholesale and retail customers, the total adjusted billed dollar amounts divided by total billed revenues. See id. at 2110, 2267. Despite the fact that Bell

Atlantic has agreed in New York to report the total number of errors that led to the adjustments, and despite the fact that this information is accessible to BA-MA, BA-MA has not committed to report the number of billing errors in Massachusetts. See id. at 2112-14.

120. **Provisioning Completion Notices.** BA-MA only is providing a billing completion notice measurement. BA-MA opposes implementing the provisioning completion notice and standards for measuring the time from actual work completion to notification of the CLEC. The billing completion notice only measures the time from when the order closed in the billing system. In measuring billing completion notice in this way, BA-MA is able to close a notice in the billing system – weeks after actual work completion and weeks after being lost in post-completion discrepancy (“pcd”) limbo (as approximately 10,000 of MCI WorldCom’s billing completion notices currently are in New York) – and meet the interval for delivery of the billing completion notice by noon the next day.

121. But if BA-MA measured the intervals for average and on-time provisioning until receipt of the completion notice, which is when CLECs can provide service information to the customer and start billing, then the notice intervals would likely be short and the notices would be sent in all cases. Thus, BA-MA would have to quickly and regularly provide billing completion notices or miss the completion interval. This latter approach has been approved by the Pennsylvania PUC (the text of the order has not been released yet) and would reduce the number of completion notice metrics required by the NYPSC to address inadequacies with Bell Atlantic’s original billing completion notice metric.

122. **Disaggregation.** Generally, BA-MA’s performance measurements should

be disaggregated by service type – such as between UNE-L and UNE-P. See DOJ NY 271

Evaluation at 6. Currently, BA-MA’s measurements aggregate multiple types of service into a single category, which could mask discriminatory conduct with respect to one type of service. At a minimum, BA-MA should offer the full disaggregation agreed to in New York.

123. Without sufficient retail and wholesale disaggregation, CLECs will not be able to determine on an “apples-to-apples” basis if they are receiving parity with BA-MA for particular services. Moreover, even if CLECs are receiving the standard interval in BA-MA’s product interval guide, they cannot be certain that this is parity with what BA-MA is providing its own customers. The appropriate level of disaggregation should include, among other things, all resale products provided by BA-MA, all the UNEs and UNE combinations ordered by the FCC in its Rule 319 Order (plus any additions ordered by the Department), all interface types used by CLECs for OSS processes, and all collocation arrangements that have price or interval differences.

Performance Remedies

124. Performance measurements alone are not sufficient to curb BA-MA’s incentives to provide inferior service to competitors attempting to win away BA-MA customers. Indeed, performance measurements are useless if BA-MA can violate them with no fear of consequences. For this reason, effective, self-executing enforcement mechanisms that are automatically triggered upon BA-MA’s non-compliance with established performance measurements and are sufficiently severe to deter non-compliance are absolutely necessary. If the enforcement remedies are too low, BA-MA will readily incur them as a small and fixed cost of

doing business. No enforcement scheme will achieve its goals unless the cost of non-compliance is higher than the cost of compliance.

125. The enforcement mechanisms contained in BA-MA's performance plan fail to meet these requirements and effectively render the few measurements BA-MA proposes meaningless. For example, BA-MA's enforcement mechanisms include "incident-based" or "per-occurrence" credits for missed installation appointments and out of service over 24 hours, which compensate CLECs on a per individual event basis. See Garbarino Aff. ¶ 95. The credit a CLEC will receive from BA-MA is a percentage of the associated non-recurring or recurring charges. For example, for a first missed UNE installation appointment, BA-MA will credit the CLEC 25% of non-recurring charges. Meanwhile, BA-MA will credit the CLEC 1/30th of the recurring charges of each day a customer is out of service over 24 hours.

126. These credits are wholly insufficient and plainly give BA-MA absolutely no incentive to comply with the measurements. Indeed, BA-MA has a greater economic incentive to pay the low credit than to provide reasonable and non-discriminatory service to CLECs. As a general amount, these low credits do not account for:

- BA-MA's retention of customer's business, potentially for many years if the customer decides against switching to the CLEC due to submeasurement service;
- The CLEC's loss of additional potential customers due to diminished good reputation of customers; and
- BA-MA's gain in market share in the long distance markets (after section 271 approval) due to customer's dissatisfaction with competitors' local service resulting from BA-MA's poor performance.

127. Moreover, as noted by the FCC Common Carrier Bureau in a September

28, 1999 letter to SBC, if per-occurrence credits are very low, payments would never reach substantial and meaningful levels until BA-MA is considerably out-of-parity for a service with huge volumes, such as Resale POTS service. Meanwhile, for services with low volumes, such as advanced services, BA-MA's payments would be very small because the number of occurrences would be so few. Thus, even if a CLEC suffered serious degraded service, BA-MA would have no economic incentive to meet the measurement or change its performance behavior. See Letter from Lawrence E. Strickling, FCC Common Carrier Bureau to Priscilla Hill-Ardoin, SBC Telecommunications, Inc. (Sept. 28, 1999).

128. BA-MA could easily absorb the per-occurrence cost of discouraging unbundled loop business growth for CLECs, particularly with the CLECs paying very high monthly recurring costs for collocations to BA-MA while not being able to generate sufficient business to cover the costs of the collocation space and the outrageously high powering charges each month. Under such a scenario, CLEC payments to BA-MA would offset the amount BA-MA pays out as per-occurrence loop remedies. This would discourage customers from switching from BA-MA to CLECs, or remaining with CLECs once they do switch.

129. An appropriate remedy plan for Massachusetts would be a per-measure remedy plan based on the specific performance of each measure for each individual CLEC. The remedies would increase with the magnitude, duration and expanse (number of measures missed) of the poor performance. For measures that are related, such as hot cut problems, the remedy plan would set one remedy if any those measures are missed.

130. BA-MA would not be over-compensated for a random variation, which has

a probability, but not a certainty, of occurring each month and which varies based on the statistical test critical value used to determine a remedy. For instance, if the Department adopts the modified z score for determining parity performance for measures with a retail analog and sets a critical value of -1.645, then no allowed misses of measures should be permitted. The level of confidence that the poorer wholesale was not random is 95% at this level of the critical value. It may be reasonable to allow a forgiveness every six months for an equal risk critical value of -1.04 (here, chances of errors in the ILEC or CLEC's favor are estimated based on another ILEC's data to be equal at about 15%). This can be addressed in more detail as BA-MA files its new plan.

131. But that new plan should not include the complex Mode of Entry scoring methods that the New York plan has with conversions to 0, -1 and -2 scores (and -2 could be a small miss or a huge one, just any measure with a worse score than -1.645) with minimum -X levels that must be reached before remedies apply and midpoint and maximum -X scores that trigger increased remedies. BA-MA should be required to meet benchmarks with no forgiveness or even statistical tests. These benchmarks were set with some level of allowed failures (5% in most cases where a 95% standard is set) and should not be reduced by applying statistical tests or allowing additional misses. If BA-MA fails to meet the 95% standard then a remedy should be paid. The plan should not contain an overall cap, but may contain a procedural cap for the Department to review if the penalties due fit the crime. The review cap should be sufficiently high so as not to negate the purpose of self-executing remedies in keeping BA-MA from stalling payments to CLECs through lengthy regulatory proceedings and litigation.

132. Except for being based on aggregate results, Bell Atlantic's Change Control

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and Special Measures plans for the New York PAP plan are closer to the remedies CLECs desire. Although all types of late change control notices should be included in the plan, the special remedies are capped at only \$34 million for hot cut and flow through metrics in New York. Here again there should not be a cap and the remedies should also cover the new restoral of BA-MA-caused customer outage measurements, as adopted by the NYPSC in its November 5, 1999 order in the Carrier-to-Carrier proceeding, and to new xDSL timeliness and provisioning quality, which were added in the final days of the NY Carrier-to-Carrier proceeding.

133. This concludes our Joint Declaration on behalf of MCI WorldCom.